

RF AMPLIFIER

MODEL *TM7288*

Available as: TM7288, 4 Pin TO-8 (T4)
 TN7288, 4 Pin Surface Mount (SM3)
 FP7288, 4 Pin Flatpack (FP4)
 BX7288, Connectorized Housing (H1)

Features

- Low Noise Figure: 1.8 dB Typical
- High Gain: 22 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5-250 MHz	5-250 MHz
Gain (dB)	22	21 Min.
Power @ 1 dB Comp. (dBm)	+7.5	+6.5 Min.
Reverse Isolation (dB)	-23	-22 Max.
VSWR In	<1.25:1	2.0:1 Max.
Out	<1.25:1	2.0:1 Max.
Noise Figure (dB)	1.8	2.2 Max.
Power Vdc	+15	+15 Min.
mA	18	20 Max.

Note: Care should always be taken to effectively ground the case of each unit.

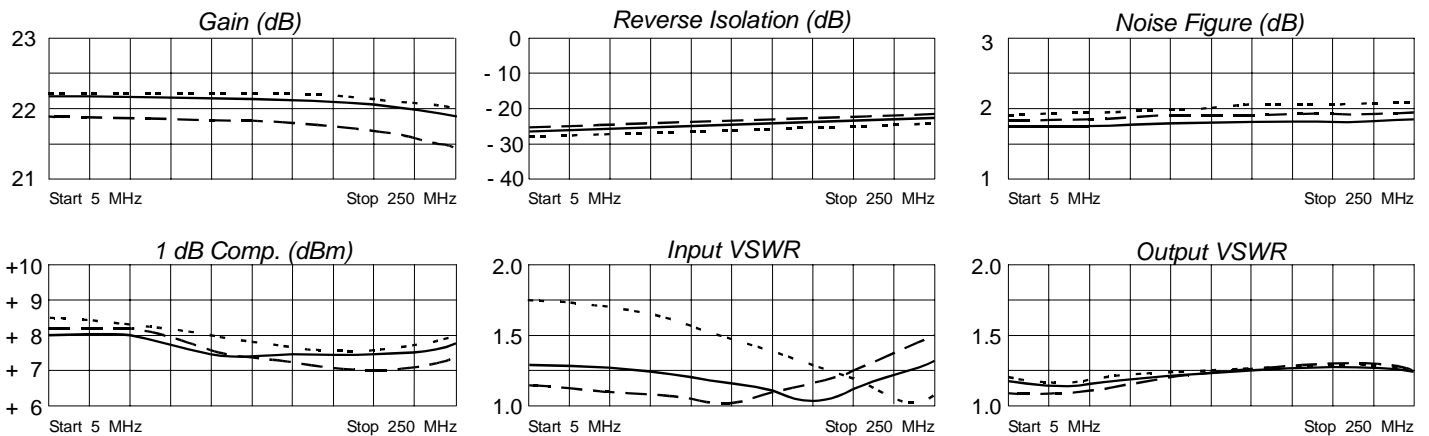
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point..... +29 dBm (Typ.)
 Second Order Two Tone Intercept Point..... +23 dBm (Typ.)
 Third Order Two Tone Intercept Point..... +20 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 18 Volts
 Continuous RF Input Power + 18 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

Typical Performance Data



Legend ——— + 25 °C - - - + 85 °C ····· -55 °C

Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.13	-176	12.66	-179	.05	4	.08	-172
10	.12	-180	12.68	177	.05	3	.08	-174
50	.11	162	12.68	161	.05	2	.08	-167
100	.08	140	12.60	141	.06	4	.09	-159
150	.04	110	12.53	121	.06	3	.11	-161
200	.05	- 49	12.51	100	.06	- 1	.12	-172
250	.14	- 78	12.27	77	.07	- 5	.10	162



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